CLAIMS

1. A solid tubular gold jewelry wire item comprising a longitudinally extending outer layer of gold and a longitudinally extending inner core of a precious metal, wherein said jewelry wire item has a wall thickness of from about .0001 inch to no greater than .004 inch in thickness.

2. The solid tubular gold jewelry wire item of Claim 1 wherein further said predetermined thickness of said gold outer layer is from about .0001 to about .002 inches in thickness.

3. The solid tubular gold jewelry wire item of Claim 2 wherein further said predetermined thickness of said gold outer layer is from about .0001 to about .001 inches thick.

4. The solid tubular gold jewelry wire item of Claim 1 wherein further said inner core comprises a precious metal alloy.

5. The solid tubular gold jewelry wire item of Claim 1 wherein further said inner core comprises silver.

6. The solid tubular gold jewelry wire item of Claim 1 wherein further said core is securely bonded to said gold outer layer.

7. A method of making a solid tubular gold jewelry wire item having an outer gold layer of a predetermined thickness and an inner solid precious metal core, comprising the steps of:

a. rolling a sheet of gold into a thickness of from about .009 to about .010 inches thick;

b. trimming said gold sheet and passing said gold sheet through a slitter to trim said gold sheet into a gold strip having

a width equal to the circumference of said solid tubular jewelry wire item to be formed;

c. winding said trimmed gold strip onto a spool;

d. feeding said trimmed gold strip from said spool through a roll former comprised of a plurality of pairs of rollers and guides in a plurality of roll forming steps further comprising:

1) forming said gold strip into a channel-shaped member;

2) forming said channel-shaped gold strip into a U-shaped member;

3) introducing precious metal core material from a spool onto a center of said U-shaped gold strip;

4) feeding said combination of said precious metal core material and said U-shaped gold member through a pair of pressure rollers for putting pressure on respective sides of said U-shaped gold strip, thereby partly closing said gold strip circumferentially around said precious metal core material into a partly-closed gold tube;

5) feeding said partly-closed gold tube containing said precious metal core material through a set of rollers for completing said circumferential closing of said gold strip into a gold tube surrounding said precious metal core material, and leaving a seam at a top of said gold tube;

6) feeding said cored gold tube through a pair of guide rollers for precisely locating said seam for welding;

7) feeding said seam-located cored gold tube through

a welder for welding said seam closed;

8) feeding said seam-welded cored gold tube through exit rollers; and then

e. feeding said seam-welded cored gold tube through a wire-drawing die at least twice to reduce its diameter and to pressure-lock said core with said gold-tube outer layer, thereby creating a solid wire comprised of a gold outer tube of a predetermined thickness in a secure adhesive contact with said precious metal core material; and then

f. feeding said cored gold wire through diameter-reducing wire drawing dies wherein said gold outer-layer thickness is reduced proportionally to a diameter reduction of said cored gold wire from before to after being subjected to said diameter-reduction wire drawing dies; and then

g. continuing to feed said cored gold wire through said diameter-reducing wire drawing dies until a diameter reduction of said cored gold wire of from about 50% to about 60% has been achieved; and then

h. annealing said cored gold wire at a temperature of about 1200 degrees Fahrenheit.

8. The method of Claim 7 wherein further said precious metal core material comprises a precious metal alloy.

9. The method of Claim 8 wherein said precious metal core material comprises silver.

10. The method of Claim 7 wherein said finally produced cored solid tubular gold jewelry wire has a gold outer layer of from

about .0005 inches to about .002 inches in thickness.

11. The method of Claim 7 wherein further said welder comprises a laser welding head.

12. The method of Claim 7 wherein further said welder comprises a tungsten inert gas (TIG) welder.

13. The method of Claim 7 wherein further said welder comprises a plasma welder.

~~14.~~ The solid tubular gold jewelry wire item of Claim ~~5~~ 4 wherein said item is a chain.

~~15.~~ The solid tubular gold jewelry wire item of Claim ~~5~~ 4 wherein said item is a rope chain.

~~16.~~ The solid tubular gold jewelry wire item of Claim ~~5~~ 4 wherein said item is a diamond cut chain.

~~17.~~ The solid tubular gold jewelry wire item of Claim ~~5~~ 4 wherein said item is a diamond cut rope chain.

18. The solid tubular gold jewelry wire item of Claim 1 wherein said item is an earring.

19. The solid tubular gold jewelry wire item of Claim 1 wherein said item is a diamond cut earring.

20. The solid tubular gold jewelry wire item of Claim 1 wherein said item is a bangle.

21. The solid tubular gold jewelry wire item of Claim 1 wherein said item is a diamond cut bangle.

22. A solid tubular gold jewelry wire item having an outer precious metal layer of from .0001 to about .002 inch thickness, and an inner solid precious metal rod core, produced by the process



25

of:

a) feeding at ambient temperature a solid precious metal rod core into an open longitudinally extending precious metal outer tube;

b) closing said open longitudinally extending precious metal tube;

c) feeding said open longitudinally extending precious metal tube having said solid precious metal rod core through a wire drawing die at ambient temperature;

d) reducing its thickness and pressure;

e) taking said precious metal core to said precious metal tube; and,

thereby creating a solid wire comprised of said outer precious metal layer in a secure adhesive contact with said precious metal rod core.

23. A solid tubular gold jewelry wire item comprising a solid longitudinally extended outer layer of a precious metal and a solid longitudinally extended inner core of a soft precious metal soldered to the outer layer, wherein said jewelry wire item has a wall thickness of from about .0001 inch to no greater than .004 inch in thickness.

~~24.~~ The solid tubular jewelry item of claim ~~23~~ where the said soft precious metal inner core is a tube.

~~25.~~ The solid tubular jewelry item of claim ~~23~~ wherein said item is a chain.

~~26.~~ The solid tubular gold jewelry wire item of Claim ~~23~~

wherein said item is a rope chain.

19 20 ~~27~~. The solid tubular gold jewelry wire item of Claim ~~23~~ 15 16 wherein said item is a diamond cut chain.

20 21 ~~28~~. The solid tubular gold jewelry wire item of Claim ~~23~~ 15 16 wherein said item is a diamond cut rope chain.

21 22 ~~29~~. The solid tubular gold jewelry wire item of Claim ~~23~~ 15 16 wherein said item is an earring.

22 23 ~~30~~. The solid tubular gold jewelry wire item of Claim ~~23~~ 15 16 wherein said item is a diamond cut earring.

23 24 ~~31~~. The solid tubular gold jewelry wire item of Claim ~~23~~ 15 16 wherein said item is a bangle.

24 25 ~~32~~. The solid tubular gold jewelry wire item of Claim ~~23~~ 15 16 wherein said item is a diamond cut bangle.

25 26 ~~33~~. The solid jewelry item of Claim ~~23~~ 15 16 wherein said outer layer is gold.

26 27 ~~34~~. The solid jewelry item of Claim ~~23~~ 15 16 wherein said outer layer is platinum.

27 28 ~~35~~. The solid jewelry item of Claim ~~23~~ 15 16 wherein said inner layer is gold.

28 29 ~~36~~. The solid jewelry item of Claim ~~23~~ 15 16 wherein said inner layer is silver.

SUB A4 37. A solid gold jewelry item comprising an outer layer of gold and a solid inner layer of a soft precious metal joined to said outer layer, wherein said gold jewelry item includes said outer layer of gold with a wall thickness of from about .0001 to no greater than .004 inches.



27

38. The solid gold jewelry item of claim 37 wherein further said predetermined thickness of said gold outer layer is from about .0001 to no greater than .002 inches thick.

39. The solid gold jewelry item of Claim 37 wherein said item is a flat plate stamped to a predetermined shape.

40. The solid gold jewelry item of Claim 39 wherein said item is an earring piece.

41. The solid gold jewelry item of Claim 39 wherein said item is a bracelet charm.



28